

REMARKS

Claims 1-28 are pending in this Application. The drawings are objected to. Claim 1 is objected to due to informalities. Claims 1-3, 7-9, 11-16, 18 and 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Keahn et al. (United States Patent No. 3,427,068). Claims 10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Keahn et al. in view of Hanyu (United States Patent No. 6,485,089). Claims 4 – 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Substance of Interview

As indicated in the Examiner's Interview Summary attached to the August 24, 2005 Office Action, a telephone interview was conducted between the Examiner and Applicants' representative, Jean McCarthy, on August 12, 2005. The Examiner explained that the Section 112, first paragraph rejection in the March 21, 2005 Office Action was due to the Examiner's assumption that the claimed inner member and outer member were tubular. The Examiner indicated that he did not believe that a *tubular* inner member or a *tubular* outer member could be formed in one-piece. Ms. McCarthy directed the Examiner's attention to Figure 2b, which illustrates that the inner member 42 and the outer member 10, at least at the cross-section indicated in Figure 2A, are actually channel-shaped. Accordingly, the Examiner suggested that Applicants submit a Replacement Sheet with corrections to Figures 1a-1c, in order to better illustrate the form of the outer member 10 and the inner member 42. The Examiner indicated that his assertion that the inner member and the outer member could not be one-piece would not apply if the members were channel-shaped, as intended by the Applicants, rather than tubular.

Amendments to the Drawings

Figures 1a–1c have been revised, as shown on the Replacement Sheets, to better convey the channel-shape of the outer member 10 and the inner member 42 indicated in Figure 2b. These changes do not involve new matter, as Figure 2b clearly illustrates that the outer member 10 and the inner member 42 are channel-shaped. Additionally, the Specification provides that:

The outer member 10 forms an inwardly facing channel shape. The inner member 42 forms an outwardly facing channel shape. The outer member 10 and the inner member 42 may both be formed with flanges 75A, 75B, respectively, at the upper and lower ends thereof. The flanges 75A, 75B may extend along the abutable surfaces of the pillar portions 21, 56 and the rockers 36A, 36B, 58A and 58B. The flanges 75A, 75B may also extend along each of the four sides of the inner and outer roof panel portions 12, 44. The invention contemplates other arrangements and locations for such flanges 75A, 75B .

(page 3, paragraph [0026])

Furthermore, the Specification provides that:

Preferably, the abutting flanges 75A, 75B on the inner member 42 and the outer member 10 depicted in Figure 2b would be laser welded together.

(page 4, paragraph [0031])

Thus, it is clear that the Specification discloses that the outer member 10 and the inner member 42 are channel shaped, as better illustrated in revised Figures 1a–1b, with flanges utilized for attachment purposes.

Claim Objections

Claim 1 has been amended in line 3 to change “members” to “member”, as requested by the Examiner. Accordingly, the objection to claim 1 is believed to be overcome.

The Examiner objects to claims 4 – 6 as being dependent upon a rejected base claim (claim 1), but notes that they would be allowable if rewritten in independent form to include all of the limitations of the rejected base claim. Claim 2 has been amended to include all of the limitations of claims 1 and 5. Thus, amended claim 2 is of the scope determined to be allowable by the Examiner. Claim 5 has been cancelled. Claim 4 depends from amended claim 2, and is believed to be allowable for at least the same reasons that amended claim 2 is allowable. Claim 6 has been amended to depend from amended claim 2 and is believed to be allowable for at least the same reasons that amended claim 2 is allowable.

Rejections under Section 102(b): Keahn et al.

Claim 1 has been amended to include the following limitation:

wherein said inner member and said outer member each include at least one portion selected from the group consisting of a B-pillar, a body lock pillar, a front hinge pillar and a rocker panel portion.

Keahn et al.'s inner roof panel 16 (Examiner-named inner member) and conventional roof panel 12 (Examiner-named outer member) do not include any of a B-pillar, a body lock pillar, a front hinge pillar and a rocker panel portion. In fact, Keahn et al. teach away from providing a B-pillar, at least, as the inner roof panel 16 and the conventional roof panel 12 are designed for a:

... “hardtop” model vehicle ... in which the front door lock pillar that normally supports each side of the roof structure terminates at the belt line of the vehicle ...

(column 1, lines 24–27)

For a claim to be properly rejected as anticipated under 35 U.S.C. § 102, every element and limitation found in the rejected claim must be found in the Section 102 reference cited by the Examiner. “A claim is anticipated only if each and every element as set forth

in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See MPEP §2131. Because Keahn et al. do not disclose an inner member and an outer member each including “at least one portion selected from the group consisting of a B-pillar, a body lock pillar, a front hinge pillar and a rocker panel portion”, as required by amended claim 1, the Section 102(b) rejection of claim 1, and of claims 7–9, 11–16, 18 and 19 are believed to be overcome at least for this reason.

The Examiner indicated that the following method steps of claims 11, 12 and 13, respectively, would not be given patentable weight because the claims are product claims:

wherein at least one of the inner member and the outer member is formed by quick plastic forming.

* * *

wherein at least one of the inner member and the outer member is formed by super plastic forming.

* * *

wherein at least one of the inner member and the outer member is formed by sheet hydroforming.

With respect to the weight to be afforded to process steps in an apparatus claim, Section 2113 of the MPEP provides:

The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or *where the manufacturing steps would be expected to impart distinctive structural characteristics to the final product*. See, e.g., *In re Garnero*, 412 F.2d 276,279,16 USPQ 221, 223 (CCPA 1979) (sic 1969) (holding “interbonded by interfusion” to limit

structure of the claimed composition and noting that terms such as “welded,” “intermixed,” “ground in place,” “press fitted,” and “etched” are capable of construction as structural limitations.)

Applicants submit that the quick plastic forming and super plastic forming methods as described in the patents set forth in paragraph [0027] of the Application (U.S. Patent No. 6,253,588 (quick plastic forming), U.S. Patent No. 5,974,847 (super plastic forming)), and incorporated by reference into the Application, as well as sheet hydroforming, allow the relatively complex shapes of the one-piece inner member 42 and the one-piece outer member 10 of these respective claims. Accordingly, the process limitations of claims 11–13 impart distinctive structural characteristics to Applicants’ inner member and outer member, and should be afforded due consideration under MPEP Section 2113. Because Keahn et al. do not disclose the use of quick plastic forming, super plastic forming or sheet hydroforming, claims 11–13, respectively, the rejection of these claims under Section 102(b) is believed to be overcome, and the claims are allowable at least for this reason as well.

Claim 19 has been amended to include the following limitations:

wherein said inner member and said outer member each include at least one portion selected from the group consisting of a B-pillar, a body lock pillar, a front hinge pillar and a rocker panel portion.

Because, as discussed above with respect to claim 1, Keahn et al.’s inner member and outer member do not include any of a B-pillar, a body lock pillar, a front hinge pillar and a rocker panel portion, the rejection of claim 19 under Section 102(b) is believed to be overcome.

Rejections under Section 103(a): Keahn et al. in view of Hanyu

A *prima facie* case of obviousness requires that the prior art references teach or suggest all claim limitations of the examined claim (MPEP 2143.03). Because neither Keahn et al. nor Hanyu teach or suggest the new limitation of amended claim 1 as

described above, the Section 103(a) rejection of claims 10 and 17, which depend from claim 1, is believed to be overcome at least for this reason.

Rejection under Section 103(a); Keahn et al. in view of Saunders et al.

Claim 20 is amended to include the following steps:

after said forming a one-piece inner member, bending the inner member;
after said forming a one-piece outer member, bending the outer member[.]

Claim 21 is amended to further specify what the bending steps accomplish. Neither Keahn et al. nor Saunders et al. teach or suggest bending of a formed one-piece inner member or outer member. The Section 103(a) rejection of claim 20, and of claims 21–28 which respectively depend therefrom, is believed to be overcome at least for this reason.

Conclusion

In light of the above remarks and the amendments to the claims as well as to the drawings, it is believed that all of the remaining claims 1-4 and 6-28 are in condition for allowance, which action is respectfully requested.

The attached Transmittal Letter authorizes the Commissioner to charge any fee associated with this Amendment to Deposit Account 07-0960. A duplicate copy of the Transmitted Letter is provided for this purpose.

Respectfully submitted,

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By 

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